

FIG. 1

9R95

INCREASING
FLEXIBILITY,
INCREASING
COMPLEXITY

INCREASING
EASE OF USE

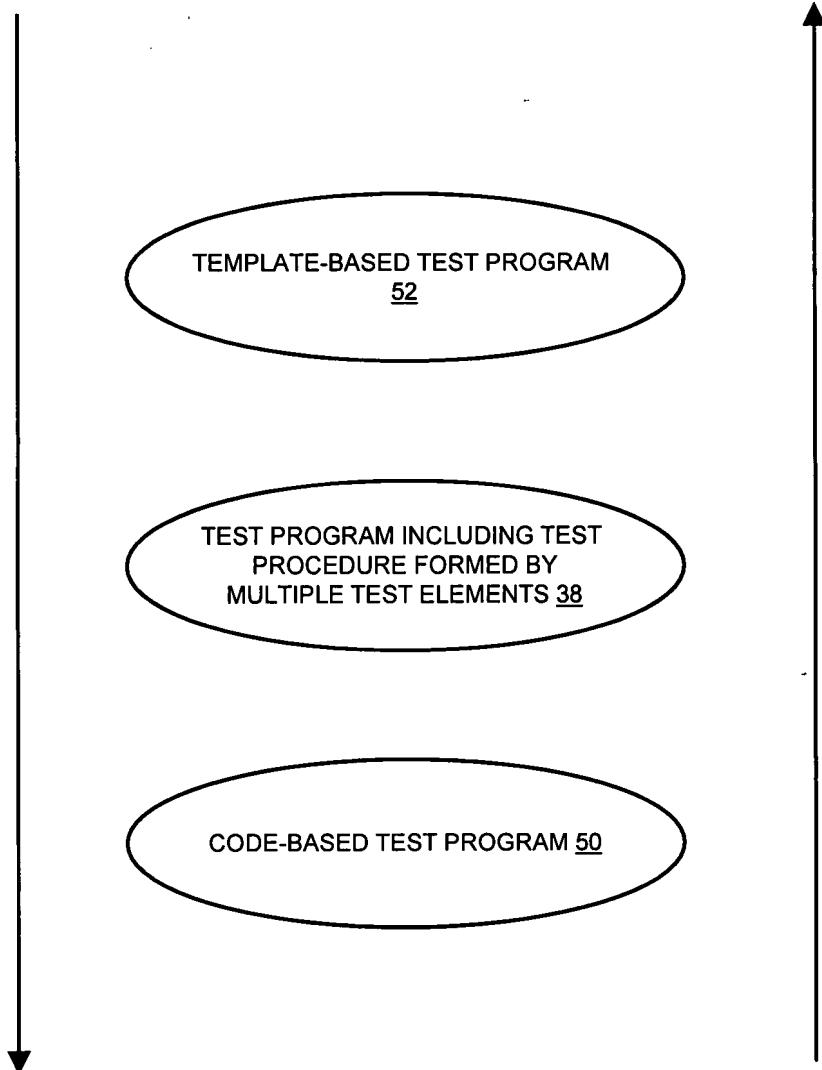


FIG. 2

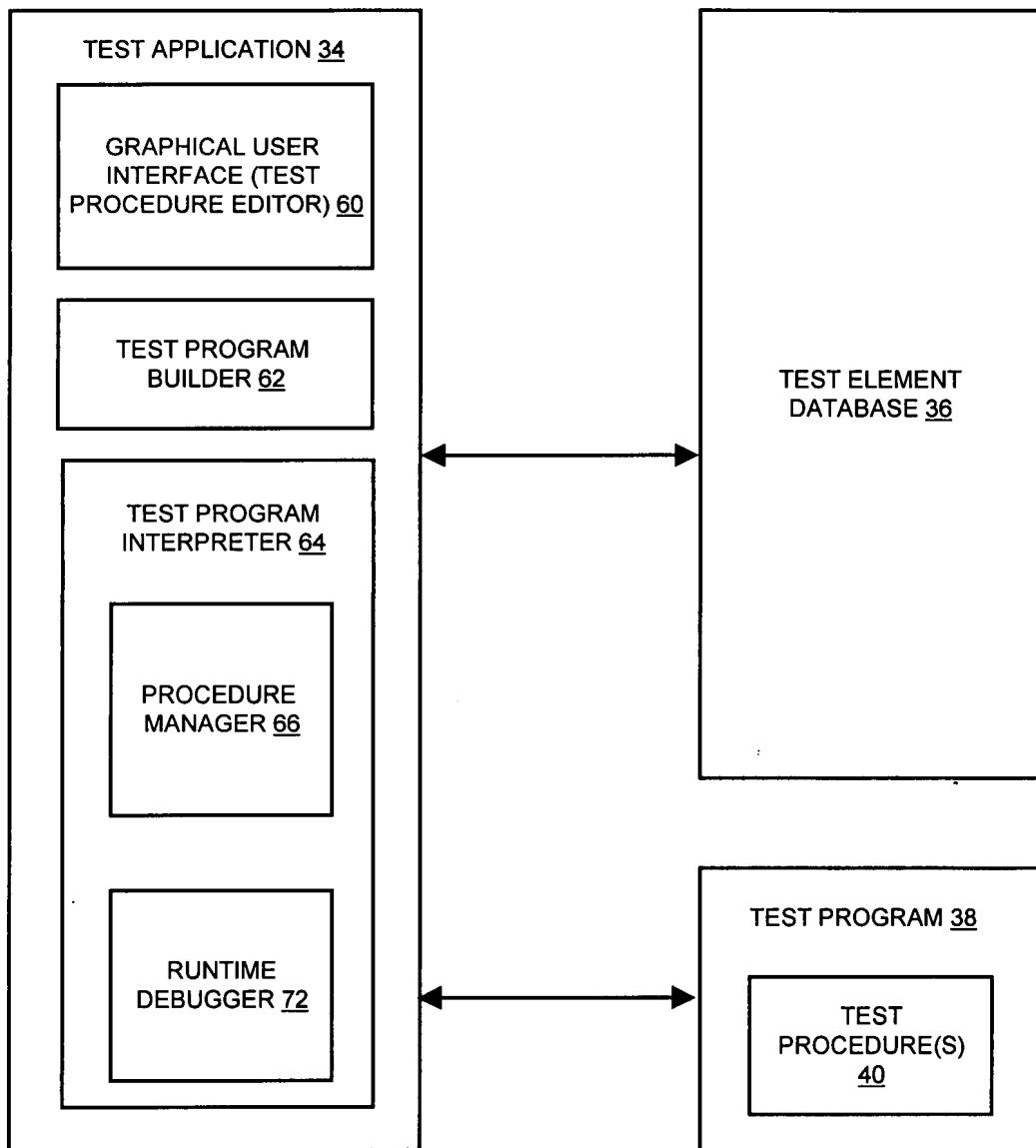


FIG. 3

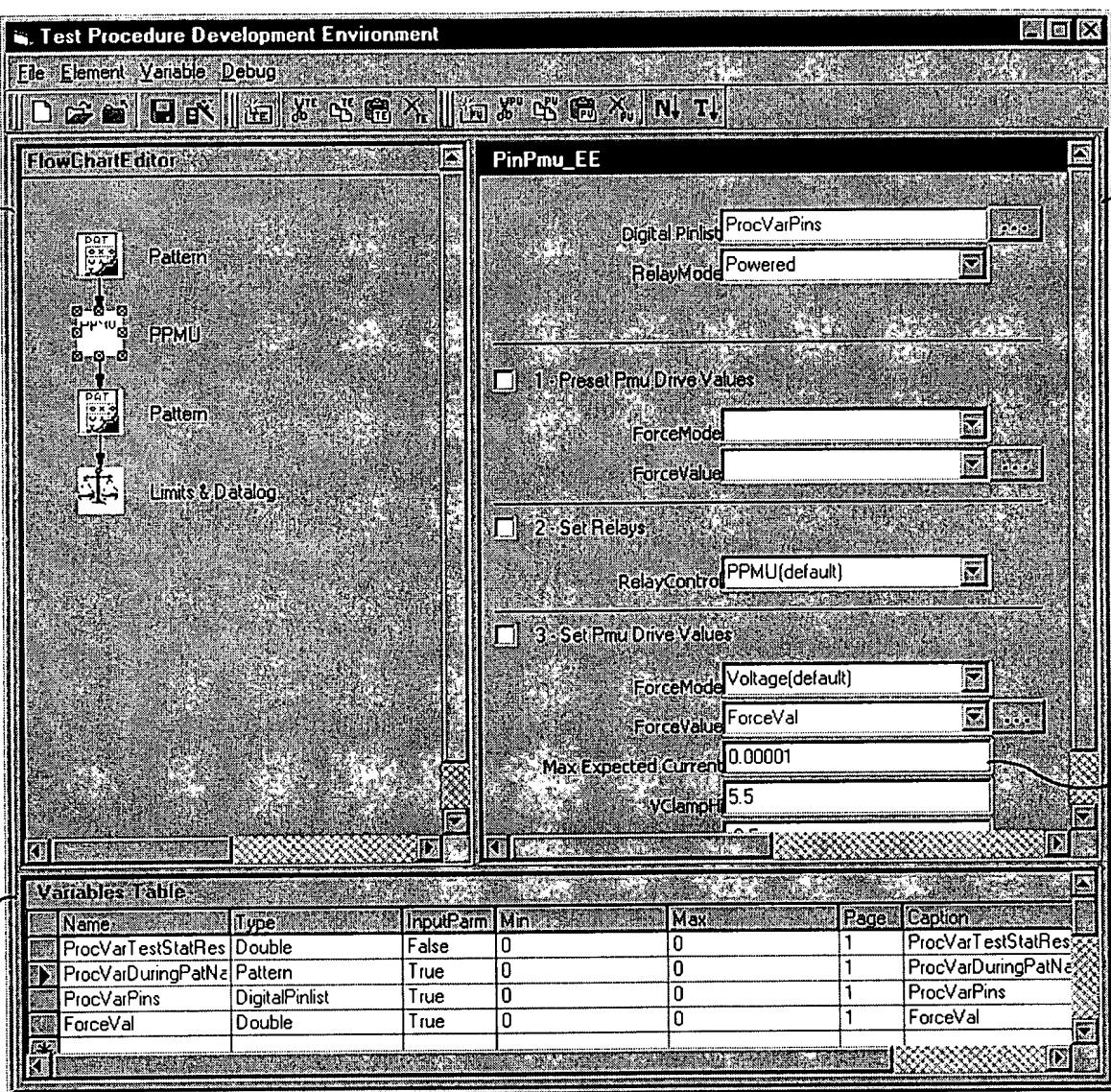


FIG. 4

DETAILED LOGIC

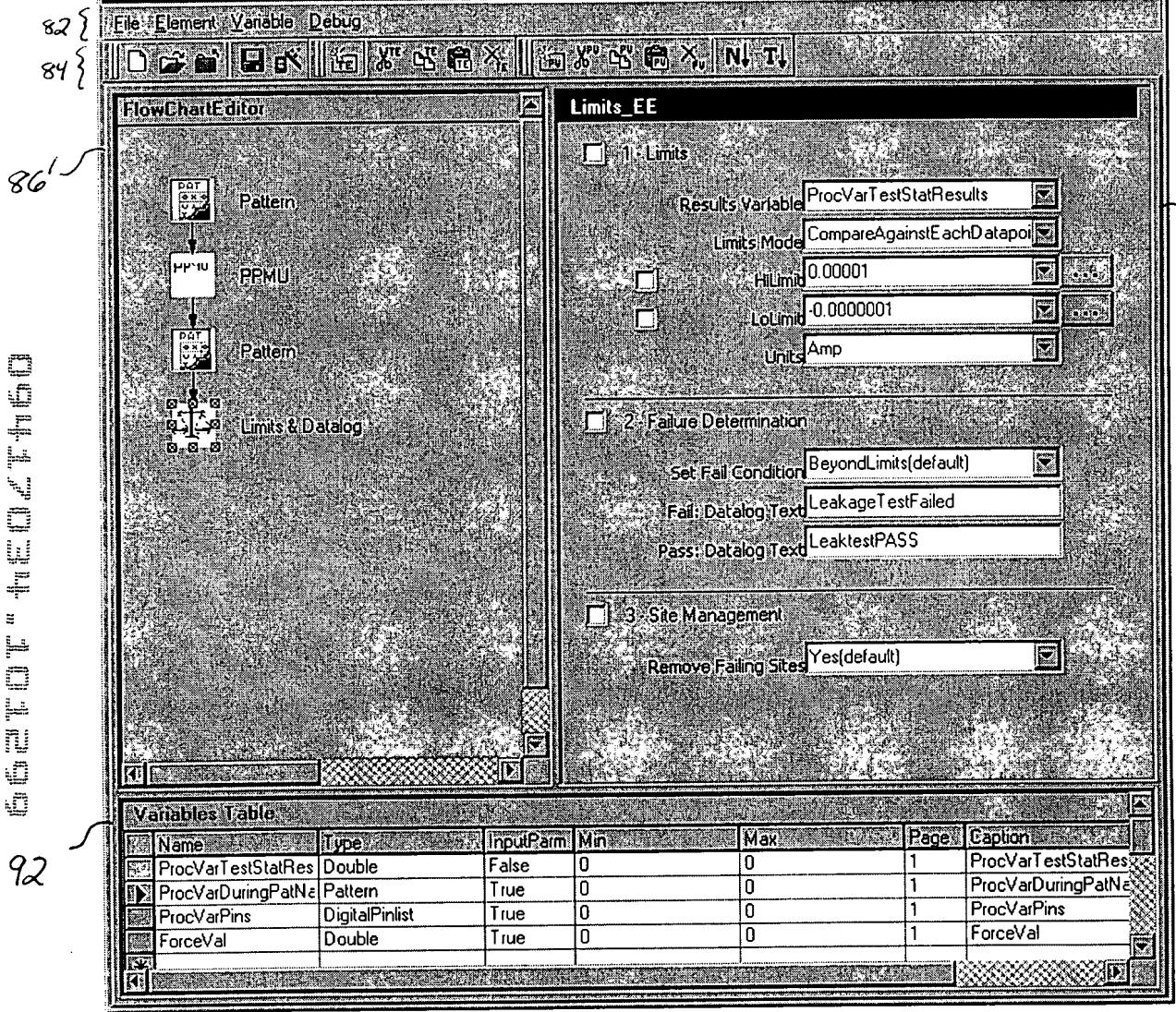


FIG. 5

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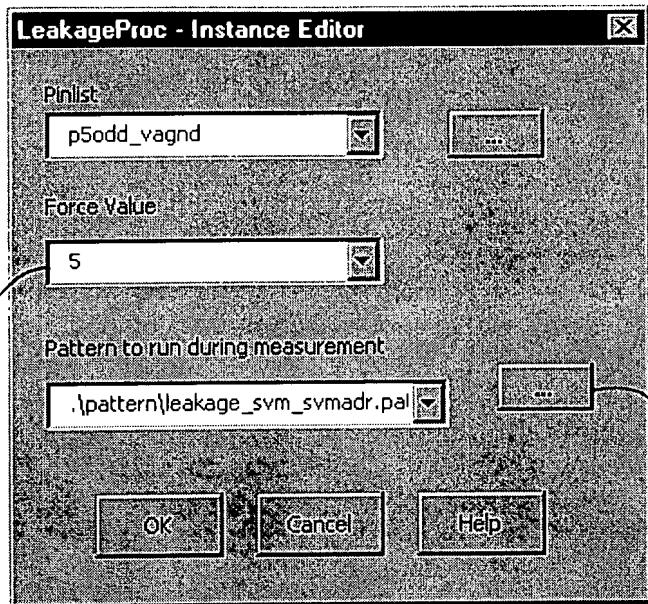


FIG. 6

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Microsoft Visual Basic - Element.xls [running] - [PinPmu_E (Code)]

(General) TestElement

```
'3 - Set Drive Values
If (SetForceValue.ArgumentStr <> TL_C_EMPTYSTR) And
    (SetIMagnitudeValue.ArgumentStr <> TL_C_EMPTYSTR) Then
    With TheHdw.pins(PinList.ArgumentValue)
        If CStr(SetForceMode.ArgumentValue) = TL_C_CURRENT Then
            'force current
            If CStr(VClampLo.ArgumentValue) <> TL_C_EMPTYSTR Then
                Call .PinLevels.ModifyLevel(chVCL, CDbl(Val(VClampLo.ArgumentValue)))
            End If
            If CStr(VClampHi.ArgumentValue) <> TL_C_EMPTYSTR Then
                Call .PinLevels.ModifyLevel(chVCH, CDbl(Val(VClampHi.ArgumentValue)))
            End If
        If CStr(SetRelayControl.ArgumentValue) <> tl_GetIndexOf(TL_C_PPRCPFSTR) Then
            te_IrangeIdx = tl_te_GetBestRange(SetForceValue.ArgumentValue, TheHdw.PPMU.ForceIRangeList, True)
            'set the Ppmu in a current forcing mode, and voltage measure mode
            .PPMU.ForceCurrent(te_IrangeIdx) = SetForceValue.ArgumentValue
            If (VClampLo.ArgumentStr <> TL_C_EMPTYSTR) Or (VClampHi.ArgumentStr <> TL_C_EMPTYSTR) Then
                'if clamps are used, then the PE relay is closed, and this then
                ' requires that the current loads be set to zero.
                Call .PinLevels.ModifyLevel(chISource, 0)
                Call .PinLevels.ModifyLevel(chISink, 0)
            End If
        End If
        If CStr(SetRelayControl.ArgumentValue) = tl_GetIndexOf(TL_C_PPRCPFSTR) Then
            te_IrangeIdx = tl_te_GetBestRange(0, TheHdw.PPMU.ForceIRangeList, True)
            'Override Functional Load levels on Pin Electronics
            ' set the PPMU itself to force OA
            .PPMU.ForceCurrent(te_IrangeIdx) = 0#
            ' Modify programmed load on Pin Electronics
            If CDbl(Val(SetForceValue.ArgumentValue)) > 0 Then
                ' set VT to ensure that load will be applied
                Call .PinLevels.ModifyLevel(chVT, TL_MAX_VT_LEVEL)
                ' set the load current
                Call .PinLevels.ModifyLevel(chISource, SetForceValue.ArgumentValue)
            Else
                ' set VT to ensure that load will be applied
                Call .PinLevels.ModifyLevel(chVT, TL_MIN_VT_LEVEL)
                ' set the load current
                Call .PinLevels.ModifyLevel(chISource, SetForceValue.ArgumentValue)
            End If
        End If
    End With
End If
```

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FIG. 7

DETAILED DESCRIPTION

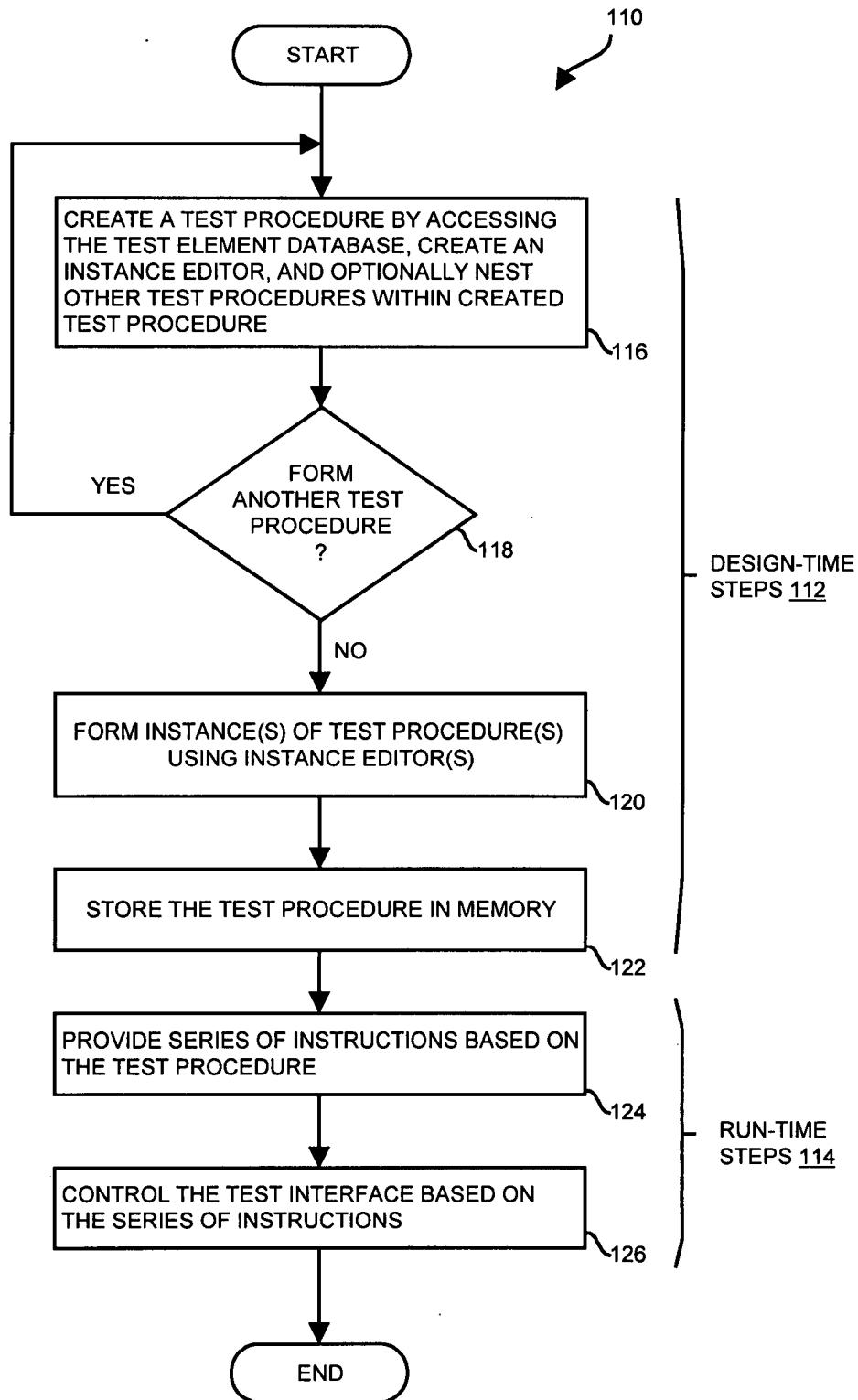


FIG. 8

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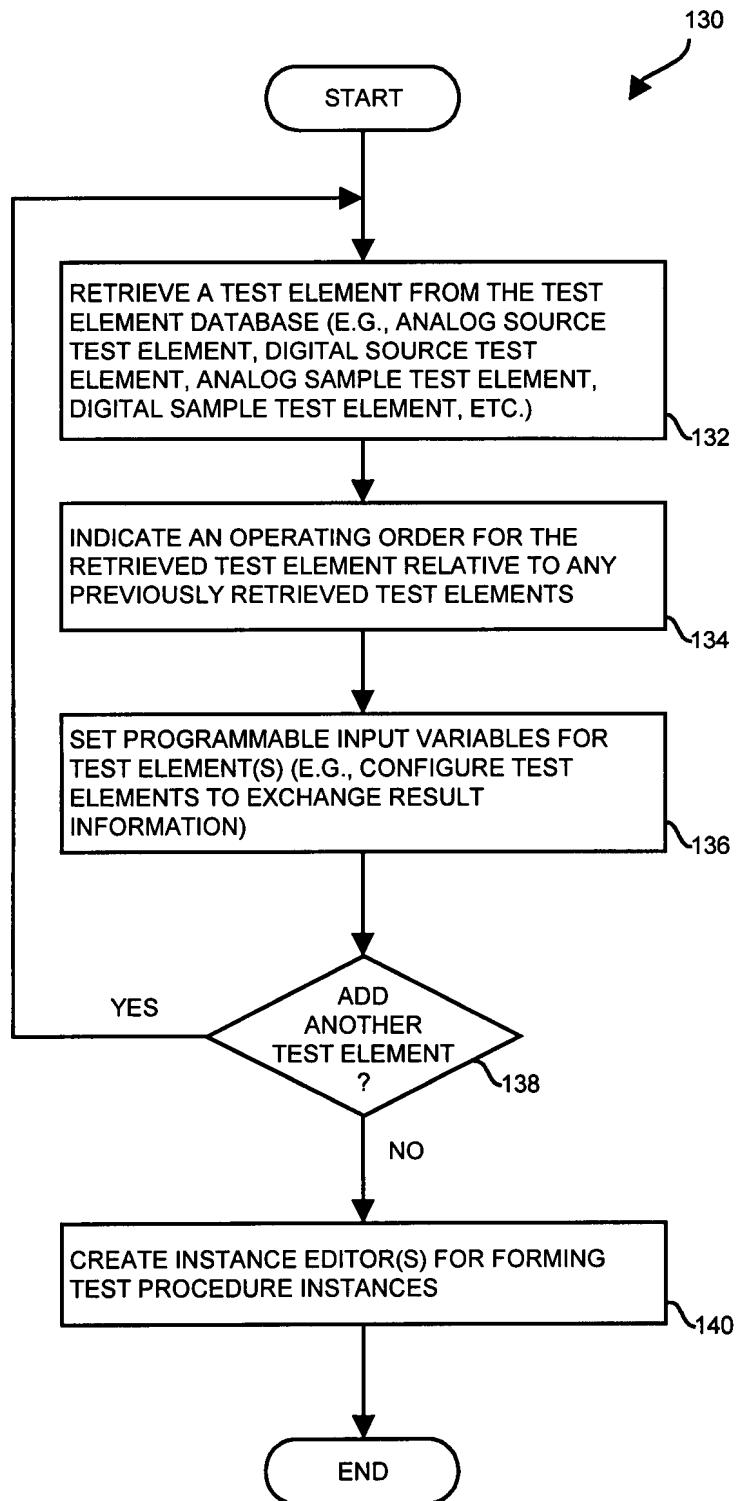


FIG. 9